

Research Article / Научная статья

UDK 338.2.

DOI: 10.14258/SSI(2024)2-03

Digital Governance: a Pathway for Combating Emerging Public Safety and Security Challenges In 21st Century Nigeria

Isma'il H. Mshelia¹, A. G. U. Kari²

¹University of Abuja, Abuja, Nigeria,
mshelia.ismail@uniabuja.edu.ng,
<https://orcid.org/0000-0002-7642-709X>

²University of Abuja, Abuja, Nigeria,
umar.kari@uniabuja.edu.ng,
<https://orcid.org/0000-0002-9201-8448>

Abstract. The digital revolution of the 21st century has not only positively affected all aspects of social life, but has also precipitated broad negative impacts such as cybercrimes which globally resulted in the loss of about \$600 billion (0.8 percent of the global GDP) in 2018. As need for a new form of governance to address the disruptive effects of the digital revolution arose, governments across the globe shifted from the 20th century bureaucracy-centred analogue governance model to a 21st century citizen-centred digital model. This paper examined the digital model of governance and its application with specific focus on Nigeria. The paper utilised secondary data from different sources including journal papers, national dailies and reports. Thus, the meaning of digital governance and Nigeria's journey in the digital landscape are examined. It is revealed that while Nigeria made a significant progress in its journey to digitalisation — with the introduction of National Identification Number (NIN) among other digital initiatives, — exclusion and insecurity are twin challenges that continue to inhibit the achievement of the ultimate objectives. It is therefore recommended that a policy framework to guide the efforts aimed at solving the problems should be designed by navigating through e-democracy, e-administration and e-services being the core relationships that characterise e-governance.

Keywords: e-governance, digital society, security, Nigeria, government, technology, crime

For citation: Mshelia, I.H., Kari, A.G.U. (2024). Digital Governance: a Pathway for Combating Emerging Public Safety and Security Challenges in 21st Century Nigeria. *Society and Security Insights*, 7(2), 47–68. (In Russ.). doi: 10.14258/ssi(2024)2-03.

Цифровое управление: путь для борьбы с новыми вызовами общественной безопасности в Нигерии в XXI веке

Исмаил Мшелиа¹,
А. Г. Умар Кари²

¹Университет Абуджа, Абуджа, Нигерия,
mshelia.ismail@uniabuja.edu.ng,
<https://orcid.org/0000-0002-7642-709X>

²Университет Абуджа, Абуджа, Нигерия,
umar.kari@uniabuja.edu.ng,
<https://orcid.org/0000-0002-9201-8448>

Аннотация. Цифровая революция, произошедшая в XXI в., не только позитивно повлияла на все аспекты социальной жизни, но и привела к негативным последствиям, проявившимся, например, в киберпреступности, глобальные потери от которой только в 2018 г. составили \$600 млрд (0,8% от мирового ВВП). По мере того как возникала необходимость в новой форме управления для устранения разрушительных последствий цифровой революции, правительства по всему миру перешли от модели бюрократического аналогового управления XX в. к цифровой модели XXI в., ориентированной на граждан. В данной статье анализируется цифровая модель управления и возможности ее применения в нигерийском обществе. В исследовании применялись вторичные данные из различных источников, включая журнальные статьи, национальные ежедневные газеты и доклады. Таким образом, рассмотрено значение цифрового управления и трансформация цифрового ландшафта Нигерии. Обосновано, что, хотя Нигерия добилась значительного прогресса в деле оцифровки данных — с введением национального идентификационного номера (НИН) и других инициатив в области цифровых технологий, изоляция и отсутствие безопасности по-прежнему являются двумя основными проблемами, препятствующими достижению конечных целей развития. В этой связи рекомендуется разработать политические рамки для руководства усилиями, направленными на решение проблем, на основе использования принципов электронной демократии, электронного администрирования и электронных услуг, которые являются основными связями, характеризующими электронное управление.

Ключевые слова: электронное управление, цифровое общество, безопасность, Нигерия, правительство, технологии, преступность

Для цитирования: Мшелиа, И., Кари, А.Г.У. (2024). Цифровое управление: путь для борьбы с новыми вызовами общественной безопасности в Нигерии в XXI веке. *Society and Security Insights*, 7(2), 47–68. (In Russ.). doi: 10.14258/ssi(2024)2-03.

INTRODUCTION

With regards to the new year (2000) that would usher in a new millennium (2nd millennium) and a new century (21st century), the Times Magazine of April 2 1991 in Freitag (2022) reveals that “a hotel, the construction of which had not yet begun, was already

fully booked for that date, and points out that flying Concorde westward would enable revelers to ring in the New Year in several widely separated cities” (quote 230). On the eve of the day, one of the revelers was quoted as saying, “tonight we’re gonna party like it’s 1999. You won’t need an excuse to celebrate the greatest New Year’s Eve of all” (quote 232). Such was the frenzy with which the 21st century, believed to have much to offer humanity, was welcomed — a year before it actually begun.

Sooner than expected, the 21st century delivered its most expected promise: the digital revolution. Consequently, governments across the globe become more reliant on “a large digital presence and complex network of large-scale information systems for administrative operations and policy-making” (Dunleavy & Margetts, 2015: 1). Information communications technology (ICT) and artificial intelligence (AI) are few areas of the digital revolution having profound impact on social realities and how societies function. Though these are breakthroughs with significant positive impacts, they also pose serious threats to individuals, public safety and national security (Kavanagh, 2019). In this vein, Lindsey (2019) reported that cyber criminals have turned social media cybercrime into a \$3 billion business.

Among these crimes are illegal trades, phishing and data breaches. As a necessary response to the disruptive effects of the digital revolution, there is a shift among governments from the analogue and obsolete bureaucracy-centred governance model, to a digital citizen-centred model which offers the government an avenue for more effective communication, service delivery, intelligence gathering and policy execution. Digital transformation has therefore “become a key objective in political agendas and governmental strategic programmes as a central part of modernizing public administration, which has raised the need for governments to adapt their *modus operandi* urgently” (Ravšelj et al., 2022: 2). In fact, it is regarded as an essential driver in the efforts of governments to address 21st century most pressing challenges and achieve the sustainable development goals (SDGs) (European Commission, 2020). The outbreak of COVID-19 pandemic in 2020 further underlines the necessity of adopting digital governance in all countries around the world (Milankovich, 2022).

Prior to the pandemic, the progress of adopting digital governance in many countries was disappointing “with the digital elements of government still an add-on or peripheral to government operations” (Dunleavy and Margetts (2015: 5). As the UN (2020) observed, some of the difficulties faced by governments in adopting digital governance emanate from their unfamiliarity with the rapidly changing technology landscape coupled with the lack of competencies needed to harness ICT for national development. In Nigeria, while respective governments have over the years fairly invested in various digital initiatives, their respective targets have not yet been achieved partly due to the foregoing reason and partly due to other challenges militating against their implementation. Insurgency, banditry, cybercrimes and other security challenges most of which are fuelled by unemployment, poverty and illiteracy are on the rise in the country. There is therefore a dire need for appropriate policy pathway that will guide the government towards curbing these challenge, while more significant investment is needed to facilitate the adoption of digital governance.

This paper analyses the concept of digital governance as a pathway for combating the 21st century emerging public safety and security challenges in Nigeria. Data from various secondary sources (including journal articles, reports, textbooks and websites) selected on the basis of strict relevance to the subject matter informed the analysis.

CONCEPTUAL ANALYSIS

The following concepts form the bedrock of this paper and are therefore analysed in this section: (1) governance, e-governance and digital governance, (2) security and public safety, and (3) digital technology.

Governance, E-governance and Digital Governance

The terms ‘e-governance’ and ‘digital governance’ are offshoots of the term ‘governance’ which in general term refers to the exercise of political power to manage and direct state’s affairs (George et al., 2021). It is divided into “demand politics” and “supply politics” with the former encompassing the expectations of the people directed to the government, and the latter, the sum of the government’s efforts towards addressing the expectations (Peters & Pierre, 2016: 8). As Furuholt and Wahid (2008: 8) observed, “literature analysis shows that strong political leadership is one of the most important success criteria for e-government projects in general and in developing countries in particular, even pointed to as the most important criteria by some”.

E-governance refers to “the public sector’s use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective” (UNESCO, 2011, cited in Milakovich, 2014: 110). E-governance is a wider concept than e-government because it is not only about the improvement of the nature of service delivery but also the relationship between the citizens and public administrators (Onuigbo & Innocent, 2015). Significant progress towards its implementation birth digital governance (Milakovich, 2014). Thus, digital governance “provide government services that don’t simply fit within a read-only paradigm of interactions between citizens, government officials and government sources of information, but to allow a paradigm that achieves more interactive, process-oriented dissemination and viewing of government information” (McIver and Elmagarmid, 2002: 10). Put differently, it is about not just electronic service delivery but also transforming, streamlining and enhancing citizens’ involvement in governance and decision-making process.

Security and Public Safety

Having originated from the Latin words ‘se’ (without) and ‘curus’ (anxiety), the term ‘security’ literally means freedom from anxiety. In the words of Kalat (2002: 413), “once people have satisfied their physiological needs, they seek to satisfy their safety needs such as security from attack and avoidance of pain”. Technically, security is defined as the sum of actions and measures, including legislative and operational procedures adopted to ensure peace, stability and the general well-being of a nation and its citizens (Shinkaiye, 2004).

The United Nations Development Programme (UNDP, 1994), has identified seven dimensions of human security from the major components of human development.

They are economic, food, health, environmental, personal, community and political security. It is in the light of these that the meaning of public safety can best be understood. According to Abubakar (2013: 43), it “refers to the absence of those tendencies that are capable of putting the lives and properties of people at risk or danger to the point that the people are unable to pursue their legitimate business”.

Digital Technology

Technology is the art of applying knowledge to solve practical problems which is as old as humanity. But digital technology is a result of advancement in science, which started in the 20th century and exploded in the 21st century. It is described as a system or hardware that makes use of digital data to achieve a specific task as defined by a user (Digital Technology Hub, n.d.). It is an umbrella term for ICT, AI, cloud computing, biotechnology, space technology and nanotechnology among many others.

There are a wide range of areas through which these manifest. ICT and cloud computing, for example, birthed social media, websites and blogs which open the door for virtual interactions, video-streaming, e-books and digital music, while AI made possible machine learning and robotics like drones and guided missiles.

THEORETICAL ANALYSIS

Since the turn of the century, governments across the globe, especially in developed countries, have made series of largely successful efforts to replace the New Public Management (NPM) model of public administration with Digital Era Governance (DEG). The NPM was the dominant model of public administration in late 20th century having replaced the traditional Weberian model which was characterised by strict paper-based communication and the hierarchy of functions and authority. The NPM, being a model for reform, had sought to disaggregate large-scale departments and promote competition in the public sector. However,

in this model, digital technologies were also marginalized, after an initial tokenistic information technology adoption aimed at better service delivery. In fact, radical NPM models worked against the successful incorporation of digital technology into government, as the IT operations of government were agencified and outsourced to global computer services providers along NPM lines, stripping digital expertise out of government (Dunleavy & Margetts, 2015: 3).

Governments began to implement e-governance initiatives not only due to the ever-growing public pressure or the spread of the Internet culture, but also the need to confront and tackle the most pressing challenges of the 21st century — such as the growing global financial crises, widened inequalities, climate change and other challenges concerning the delivery of services in education, health and transport among others (Kosorukov, 2017). The attainment of maturity in e-governance then led some countries to digital governance. As OECD (2017: 15) opined,

this paradigm shift reflects a focus on more ambitious objectives. Governments are not looking to use ICTs to enhance services that were designed in a pre-digital era with an analogue mind-set, but to fully re-engineer services to make them digital by design. By leveraging data and technology as core components of public sector reform, digitally-

advanced governments aim to build a user-driven public administration that is better able to meet citizens' needs and tackle the important policy challenges of our time.

Dunleavy & Margetts (2015) among other scholars have provided a theoretical foundation for explaining the waves of digitalization of public administration in particular, and the digital age in general. They put forward “an ‘Essentially Digital’ model of Governance (EDGE) to navigate this changed world, a model of bureaucracy where finally digital technologies take centre stage in government organisation (p. 2).” However, while most developed countries graduate from e-governance to digital governance, “developing countries are experimenting on their own to find an approach that will work for them and will best serve their needs (Microsave Consulting, 2020: 6).” Nath (2003) has identified five generic models of digital governance in developing countries, which are: broadcasting/wider-dissemination, critical flow, comparative analysis, mobilisation/lobbying and interactive-service models.

Owing to its contextual variations and multifaceted nature, many researchers have streamlined their efforts towards specific issues on the different aspects of digital governance in various contexts. For example, Bernhard (2014) examined the local implementation of e-government policies in Sweden, Hallsworth et al. (2016) examined the role of digital technologies in modernizing healthcare system, and Nugraha et al. (2020) studied the development of SMS gateway system to online registration at a Hospital in Indonesia.

NIGERIA'S JOURNEY TOWARDS DIGITAL GOVERNANCE

In term of the digitalization of public administration, Nigeria cannot be said to be riding a camel in a jet age, unlike in the purely political spectrum in which public affairs analysts believe it is. In this section, the country's digital initiatives as well as the challenges militating against their successful implementation are examined.

Digital Initiatives of the Nigerian Government

The ground was set in 2001 when GSM came into the country with the arrival of Econet telecommunications company (now Airtel) followed by MTN, Globacom and Etisalat (now 9mobile). This set the stage for digital inclusion in Nigeria which grew alongside many e-governance initiatives. At the federal level of government, the major drivers of the multi-dimensional digital initiatives are the ministry of communication and digital technology, Nigerian Communications Commission (NCC), and the National Information Technology Development Agency (NITDA). Being multi-dimensional means the digital initiatives can be broadly categorised under economic, political and educational spectra as subsequently discussed.

Economic Sector

The first public sector in Nigeria to receive a commendable effort towards digitalisation is the banking sector. This began with the banking reform of 2004 which aimed at transforming the sector in keeping with 21st century trend. The first phase of the reform was consolidation programme in 2004 which, according to the then Central Bank of Nigeria (CBN) governor, was a proactive measure to “strategically position Nigerian banks to be active players and not spectators in the emerging world” (Soludo, 2004: 4). Prior

to the consolidation, the capital base of most commercial banks in the country was less than \$10 million. But after, “banks were consolidated through mergers and acquisitions, raising the capital base from N2 billion to a minimum of N25 billion, which reduced the number of banks from 89 to 25 in 2005” (Sanusi, 2012: 117).

The CBN subsequently issued guidelines for the introduction of e-banking. This paved way for commercial banks to install Automated Teller Machines (ATMs) for cash withdrawals, and to issue e-money products such as credit cards, debit cards and digital cash among others. This reduced delays in clearing of payment instruments, reduced cash transactions and enhanced monetary policy transmission mechanism (Ojong et al., 2014). In response to the 2008 global financial crisis and many challenges confronting the Nigerian banking industry, there was another banking reform in 2009 which solidified the digitalisation of the sector by first, introducing a uniform 10-digit account number called the Nigerian Uniform Bank Account Number (NUBAN). Sequel to mandating all Federal Government Ministries, Departments and Agencies (MDAs) to replace all cheques payments with electronic payments in January 2009, the CBN on August 19th 2010 mandated all commercial banks to replace non-uniform account numbers with the NUBAN.

This, according to the CBN (2010), would not only proffer lasting solution to the many of the electronic payment problems being experienced but is also in line with global best practice such as the International Bank Account Number (IBAN), and is in compliant with the Nigeria Cheque Standard and the West Africa Monetary Institute required 10-digit Account Number structure which aimed to foster economic integration among the members of the Economic Community of West African States (ECOWAS). The scheme was a huge success and in 2018, the CBN issued an exposure draft for revised standard of the NUBAN. According to the CBN (2018a: 2) “in view of the success of the NUBAN scheme across DMBs and the increasing role of the OFIs in the Electronic Payments System, it is imperative that the scope of the scheme be expanded to include the OFIs”.

The introduction of agent banking scheme in 2013 was another giant stride in the banking sector. It refers to the provision of financial services by a third party (agent) on behalf of a principal — a licensed deposit taking financial institution and mobile banking operator (CBN, 2013). It allowed the operators offer banking services including cash deposits, withdrawals, transfers and bills collection (Nwankwo & Nwankwo, 2014). This offered access to basic financial services to a significant proportion of Nigerians, especially those in rural areas who were hitherto financially excluded. The practice was already flourishing across the globe to service a client segment underserved by conventional banking coverage (Afande & Mbugua, 2015).

Again, in February 2014, the CBN launched Bank Verification Number (BVN) in order to create a database that captures the biometrics of all bank customers and give each a unique verifiable identity, thereby enhancing the security of electronic payment system (CBN, 2017). The BVN was solidified with yet another unique digital identity, the national identification number (NIN) — a product of the new computerized national identity card launched by the National Identity Management Commission (NIMC) in August 2014. Being equipped with a microprocessor to store the personal and biome-

tric data as well as keys, certificates, and other data of the cardholder, the National identity card is in the long term meant to provide not just unique electronic NIN for identity verification but to also serve as a tool for various e-services such as e-Transport, e-Voting, e-Health and e-Banking. With regards to its potential role in the economic transformation of the country, Thales (n.d.) reiterates that: with the new eID program, the country is also signalling the broadest financial inclusion program on the continent... It will offer millions of Nigerians — most of whom have never had access to a banking service — the security, convenience, and reliability of electronic payments with 13 applications, including MasterCard's prepaid payment technology.

Though cashless economy, being the ultimate objectives of the forgoing digital initiatives has not yet been achieved, there has been a significant progress towards it. According to NIBSS (2022a), a total of N38.9 trillion electronic transactions through the NIBSS Instant Payment platform (NIP) was recorded in November 2022 alone, which brought the total value of NIP deals in 2022 to N345 trillion with the NIP volume rising to 492.2 million — a 53.8% increase over 319.9 million recorded in the same period the previous year (see Figure 1).

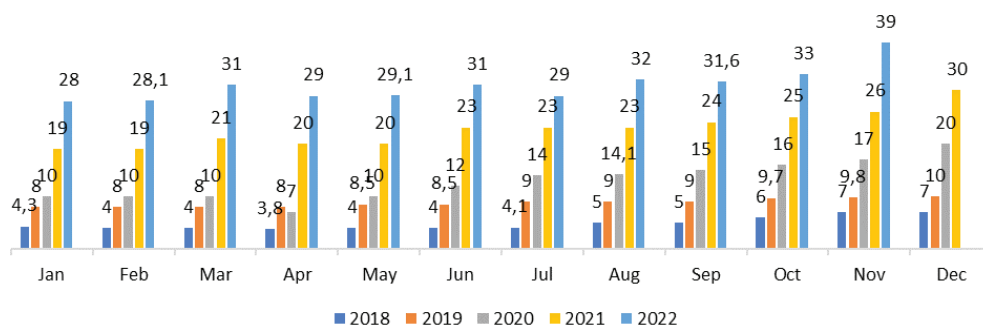


Figure 1 — Values of NIP Transactions (NGN Billions).

Source: Adapted from NIBSS (2022).

Рисунок 1 — Объемы транзакций NIP (миллиарды NGN).

Источник: адаптировано из NIBSS (2022).

Both the volume and value of the NIP transactions are expected to significantly increase in subsequent years due to the new CBN policy that comes in the wake of redesigning N1,000, N200, and N500 notes in December 2022. The policy, which comes into effect on January 9, 2023, limits weekly cash withdrawal by an individual and corporate organisation to N100,000 and N500,000 respectively. As NIBSS (2022) emphasised,

while the cashless policy of the Central Bank of Nigeria (CBN) is already gaining traction with many Nigerians embracing the use of the various e-payment channels for transactions, the revised cashless policy, which is further limiting the amount of cash that can be withdrawn by individuals and corporate organisations will further drive a surge in electronic transactions across the country.

Built upon the foregoing digital initiatives are other technologically driven economic programs. These include the Treasury Single Account (TSA) and Integrated Personnel Payroll Information System (IPPIS) both of which aim to curb corruption among the federal government MDAs, and to harmonise the federal accounts for efficiency. Economic empowerment programs such as Conditional Cash Transfer and Trader Monie have also been built upon the digital initiatives of the banking sector. The benefits associated with these are numerous. They positively impact on earnings, market shares, financial inclusion, customers' satisfaction and banks profitability (Chude & Chude, 2014). Economic growth is, however, the ultimate benefit (See Figure 2).

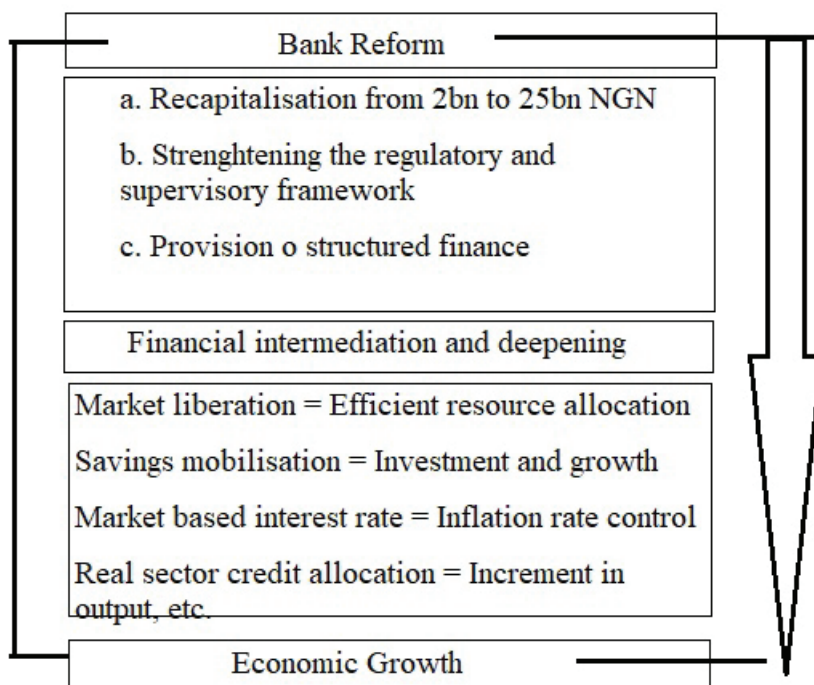


Figure 2 — The Impact of Banking Reforms on Nigerian Economy.
Source: Adapted from Akpansung and Gidigbi, (2014: 95).

Рисунок 2 — Влияние банковских реформ на экономику Нигерии.
Источник: Адаптировано из Акпансунга и Гидигби (2014: 95).

Political Sector

Digitalization in the Nigerian political subsystem can be looked at from two prisms: electoral system and political communication. The foundation for digitalizing the electoral system was laid in the 2007 electoral reform which introduced the Permanent Voter's Card (PVC) and the Smart Card Reader (SCR) for the verification of voters. Both were used in the 2011 and subsequent general elections. This innovation has proven

a major leap and enhanced the credibility of the elections having drastically reduced impersonation and multiple voting experienced in previous elections (Kazeem, 2019). And, in a bid to drive towards full digitalization of the electoral system, the government enacted a new electoral law to guide the conduct of 2023 and subsequent general elections.

The new law “comes with a lot of innovations and is technologically driven, ostensibly revolutionising elections process in the country to increase its integrity (Ojedele, 2022: para. 6).” For example, it introduces Bimodal Voter Accreditation System (BVAS), a compact electronic device designed not only to verify the genuineness of PVCs and authenticate voters but also to be directly uploading each polling unit results to the INEC Result Viewing Portal (IREV), while also serving as the INEC Voter Enrolment Device (IVED) during voter registration. In the light of this, the INEC chairman was quoted as saying:

it is our hope that the 2019 general elections will be the last generally manual elections..... already, the Commission has an electronic register of voters. Similarly, voter accreditation has also gone electronic. It is time for a new legislation to remove all encumbrances to further deployment of technology in the electoral process, especially in the accreditation of voters and transmission of election results (INEC, n.d., para. 1–4).

In term of political communication in 21st century Nigeria, there is heavy reliance on digital technologies (Inobemhe, Isah, & Abu, 2021). Governments and individual leaders at all level in the country are taking advantage of digital technologies in governance process. This, they achieve, by utilising the internet in almost all formal communications with the citizens, thus reducing overreliance on manual communication or print and broadcasting media. In this vein, virtually all MDAs now have websites through which they announce new policies, advertise vacancies and conduct recruitment assessment and screening exercises among other things.

They also directly communicate with the people through their respective social media handles such as Facebook, WhatsApp, Instagram and X (formerly Twitter) on which many Nigerians are active. This enables them to directly interact with the people, carry out sensitization campaigns and other things, consequently enhancing political participation in the country (Omotayo & Folorunsho, 2020). Ahead of elections, for example, INEC has been using various social media platforms to sensitise voters on the benefits of their participation, as well as the need to shun any form of electoral misdeed towards free and fair elections (Paul, 2019).

Education Sector

The Nigerian federal ministry of education and other MDAs have also recognised the relevance of ICT in the education sector. Owing to this, United Tertiary Matriculation Examination (UTME) was introduced by the Joint Admission and Matriculation Board (JAMB) in 2014. The UTME is a computer based standardised examination for prospective undergraduates, which unified and replaced the pen-on-paper University Matriculation Examination (UME) and others.

However, the gateway to the UTME — the senior school certificate examination (SSCE) conducted by the West Africa Examination Council (WAEC) and National Examination Council (NECO) — have remained in their pen-on-paper format. There are simply no many universal digital initiatives in the Nigerian education sector. This

is because, primary and secondary schools as well as state owned tertiary institutions are largely being controlled by their respective state governments who are responsible for designing their modes of operation. And while the federal government owns and fund its tertiary institutions across the states, the statutory autonomy granted to each of them means they are at liberty to design their modes of operations.

Different institutions across the country have adopted various electronic payment platforms for the payment of fees and other school charges. This made the process seamless for students while also helping the schools to reduce or eliminate fraud altogether. The e-payment system was designed by schools in collaboration with CBN licensed Payment Service Solution Providers (PSSPs).

In the area of knowledge delivery and evaluation, various schools have embraced ICT with each growing at their pace. This was accelerated by the outbreak of COVID-19 pandemic in 2020 which led to the closure of all schools in the country for about a year, thus reiterating the need to reduce overreliance on face-to-face mode of teaching.

Challenges Confronting Digital initiatives in Nigeria

There are numerous challenges militating against the success of the digital initiatives of the Nigerian government, most of which are fuelled by endemic public sector corruption. They can however be broadly classified as: exclusion and insecurity.

Exclusion

Nigeria has a population size of 221,279,177 (World Population Review, 2023) and majority of them are educationally, digitally and financially excluded. In term of education, being the key to all sorts of inclusion and empowerment, it is reported that 31% of the adult population in Nigeria are illiterates (Suleiman, 2022).

GSM is the gateway to digital inclusion in Nigeria and there are only 208.6 million active GSM lines in the country (Adepetun, 2022). Given that most Nigerians use dual sim phones while many others use more than one phone, this implies that at an average of three lines per subscriber there are about 70 million GSM users in the country. This means over 68% of Nigerians are digitally inactive. Indeed, in an investigative report, Ramon & Azubuikwe (2021: para.1) revealed that there are millions of people in the country “who have never communicated via a mobile phone.”

Financially, the National Financial Inclusion Strategy (NFIS) launched in 2012 revealed that 46.3% of Nigerians were financially excluded, a gap it ambitiously sought to reduce to 20% by 2020 albeit unsuccessfully (CBN, 2018b). And in a study on the gender dimension of financial inclusion in Nigeria, CBN & EFInA (2019: 6–7) revealed that financial exclusion was higher among women standing at 36% against the 24% for men, while “progress towards financial inclusion has been adversely affected by unforeseen socio-economic factors such as the economic recession, the precarious security situation in parts of northern Nigeria, and other factors such as the slow uptake of digital financial services”.

In this vein, the total number of BVN enrolment as of April 10, 2022 was just 54 million (NIBSS, 2022b) which means less than 25% of Nigerians have bank accounts. According to the National Identity Management Commission (NIMC, 2021), almost the same number of enrolments has been recorded in the NIN scheme as of May 2021. In order to boost the NIN enrolment, the government had since 2015 statutorily man-

dated all public and private institutions in the country to demand for the NIN in transactions requiring the identity of an individual, and had in 2020 received a loan of \$433 million from World Bank and others to enhance the scheme (Thales, n.d.).

Insecurity

Security is a requisite for high level growth and development. Insecurity is therefore the most devastating challenge confronting Nigeria and its quest for paradigm shift in the digital landscape. It encompasses all forms of crime, insurgency, violent secessionist agitations and armed banditry across the length and breadth of the country, all of which continue to undermine not only the country's quest for digitalisation and economic development but also its sovereignty (Mshelia, Otakey, & Salami, 2022). Public safety in the country is so jeopardised that seven out of 10 members of the public are afraid of victimisation (Oluwaleye, 2021). With internal security so jeopardised by spiralling crime, public disorder and internal crisis, the country is struggling to provide a stable platform for long-term growth, even as it somnambulates in its journey to digital governance (Abubakar, 2013). Beyond this, however, digital technology itself provides a platform for the phenomenon of insecurity generally referred to as cybercrimes.

The foremost impact of cybercrime is direct financial loss to individuals, organisations and governments. A global survey consisting of 10,063 individuals in 10 different countries showed that more than one third of the respondents reported being victims of cybercrime between 2018 and 2019 (NortonLifeLock 2020). Also, according to McAfee (2018), due to cybercrimes, the world's economy lost about \$600 billion, or 0.8% of global GDP. In their words:

to put the latest statistic in perspective, it amounts to more than the income of almost all but a few countries. When you look at the cost of cybercrime in relation to the worldwide internet economy — \$4.2 trillion in 2016 — cybercrime can be viewed as a 14% tax on growth (p. 1).

In Nigeria, estimated \$800,000,000 was reportedly lost to cybercrimes in 2018 (Azeez 2019), while a report in 2019 put the average annual costs of cybercrime in the country at \$328,842,878 (Ohwovoriole, 2019). Indeed, CBN (2005) had envisaged that cybercrimes by unscrupulous elements would pose a serious challenge to the banking system in particular, and the society in general. In 2021, the government had to shut down Twitter for seven months due to 'the persistent use of the platform for activities that are capable of undermining Nigeria's corporate existence' (Akinwotu, 2022). As synthesis of evidence shows, social media is particularly "an environment that facilitates violent radicalization" (Alava, Frau-Meigs, & Hassan, 2017: 6). In addition, Mshana (2015) found that child sexual exploitation, harassment, digital piracy, hacking, damaging and spam are other threats internet users are most frequently exposed to.

One implication of the foregoing threats is that they directly aid digital and financial exclusion as many people developed apathy towards digital initiatives. Consequently, the Nigerian government deemed it necessary to re-orient the youth by collaborating with other stakeholders to come up with different programmes which led to the setting up of a pilot project of a Computer Emergency Response Team (CERT) centre, and the National Cybercrime Working Group (NCWG) among others (Ibrahim, 2019).

APPLYING E-GOVERNANCE TO COMBAT SECURITY AND PUBLIC SAFETY CHALLENGES IN NIGERIA

Achieving the objectives of digital initiatives relies as much on combating the challenges inhibiting their success as on their effective implementation. This requires a holistic approach that tackles the root causes of the phenomena the achievement of which also requires the application of digital technology. To this end, the government needs a digital governance policy frame work. Since insecurity is the most intractable of the challenges, there is a need for policy framework primarily designed to guide the security agencies on the application of digital technologies in collaboration with other sectors to combat insecurity in the country. However, this will require effective navigation through the three core types of relationships that solidify e-governance (see Figure 3), and pave way for security and public safety (see Figure 4).

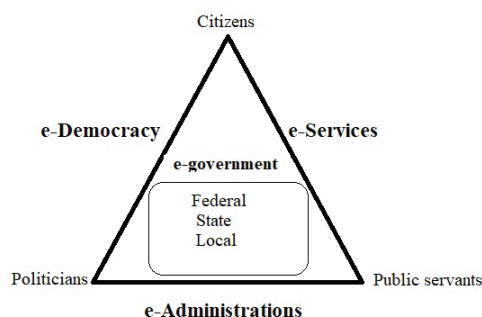


Figure 3 — Three Relationships in e-government

Source: Adapted from Wihlborg (2005) cited in Bernhard (2014: 20–21).

Рисунок 3 — Три взаимоотношения в электронном правительстве

Источник: Адаптировано из Wihlborg (2005), цитируется по Bernhard (2014: 20–21).

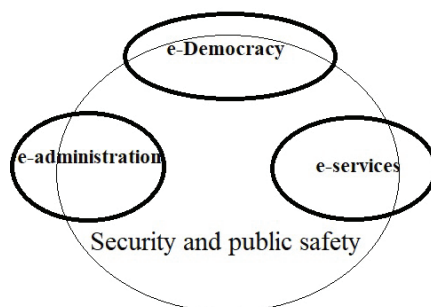


Figure 4 — The Impact of e-governance on Security

Source: The authors' compilation.

Рисунок 4. Влияние электронного управления на безопасность.

Источник: Авторская редакция.

E-democracy

This implies the relationship between the electorate and the elected. First and foremost, appropriate channels of direct communication between the people and the government needs to be created and strengthened. By so doing, the leaders and security agents will have first-hand knowledge of the security and other concerns of the masses. In this regard, the internet, being the most used channel of communication with up to 5.3 billion users in the world is indispensable. A typical internet user with an average of just 397 minutes per day, “spends more than 40% of their waking life online” (Kemp, 2022). As Milankovich (2022) observed, social media particularly are the most utilised digital channel of communication with Facebook alone having a staggering 2.6 billion users — nearly one-third of the world’s population. Thus,

social media can be a powerful tool for governance. It enables new forms of political participation — how citizens ensure that their interests are translated into policies that serve them — because it provides means for citizens to engage in discussions with each other, their elected representatives and other political officials on how to steer society. It can also help governments become more efficient and enhance citizen engagement (UN 2020: 90).

Social media can also facilitate anti-violence and peace-building efforts. They are therefore capable of achieving such in Nigeria (Uzuegbunam & Omenugha, 2018), as they have been in Israeli-Palestinian context (Sher & Sturn, 2018). But given the misuse of social media in Nigeria, effective social media policy needs necessarily be formulated to regulate their use in order to strengthen and not destroy e-democracy. In this vein, POST methodology can be a suitable departure point. It emphasised the significance of people, objectives, strategy, and technology (POST), reiterating the need to first consider the people and their needs, then specific objectives to achieve, and appropriate strategies to adopt, before considering what technological initiatives should be introduced (Alonso, 2021). In addition,

a government social media policy can also benefit from consulting an OECD working papers on public governance entitled ‘Social Media Use by Governments: A Policy Primer to Discuss Trends, Identify Policy Opportunities and Guide Decision Makers’. This document provides a checklist for purpose-oriented use of social media in the public sector which addresses all the important issues of objectives and expectations, governance modes and guidelines, legal compliance, skills and resources, collaboration and community building; and managing risks of social media use (UN 2020: 127).

E-administration

E-administration, being a core component of e-democracy, is all about the provision of e-services. It encompasses relationships both vertically and horizontally, geared towards e-service delivery. Vertically, it means the relationship among the levels of government (local, state and federal governments) and horizontally, it involves the relationship among various government agencies and big businesses in each of the levels. E-administration simply reiterates the indispensability of effective collaboration among all government levels and agencies in providing digital services that are responsive to the needs of the society. Indeed, “there are some good reasons to believe that transition towards an effective digital governance framework can be achieved by capacity building of government departments” (Hamid, Jhajhi, & Humayun, 2020).

There are many instances of e-administration in Nigeria which the security sector can benefit from. For example, NIN-SIM linkage policy and the resulting SIM blockage of defaulters is an e-administration involving the NIMC, NCC and GSM service providers which the security agencies can utilise to track and apprehend suspected criminals. Similarly, the security agencies can collaborate with the CBN and commercial banks to monitor the financial transaction of prime suspects.

E-service

This is the end product of e-democracy and e-administration, representing the relationship between public administrators and citizens. Public administrators across the MDAs need to utilise digital technologies to offer the masses a wide range of effective social welfare services such as formal education and health care. Improving both digital and financial inclusions through e-services in Nigeria is also necessary as it will not only strengthen the country's e-democracy but will also go a long way in curbing insecurity since the people will be empowered with the essential knowledge necessary to fight poverty and other harbingers of insecurity. As Naraya et al. (2000) revealed in World Bank's "Voices of the Poor", access to knowledge and opportunities, rather than charity, are what the people preferred in their fight against poverty and the conditions leading to it. In addition to empowering the citizens, effective communication and access to strategic information increase the tendency of their participation in governance, which in turn lead the society to achieving human and economic growth, as well as enhanced security and public safety (see Figures 5 and 6).

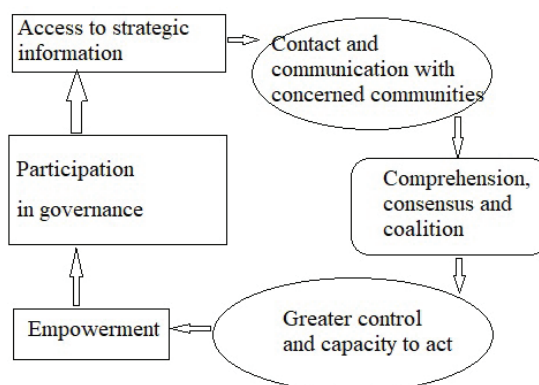


Figure 5 — The Positive Impact of information and Communication.

Source: Modified from: Nath (2003: 4).

Рисунок 5 — Позитивное влияние информации и коммуникации.

Источник: Модификация: Натх (2003: 4).

One way to integrate all of these is the development of smart cities — a municipality that uses ICT to enhance operational efficiency, connect with its inhabitants and offer them qualitative social welfare services (TWI, n.d). Lagos city in Nigeria is on course to becoming a fully developed smart city. The state's administrators are overseeing a 3000km

fibre metro network cables and broadband infrastructures among other projects that will improve e-service delivery, boost e-commerce, empower the citizens, encourage innovations and enhance security of lives and properties (Ogunrinde, 2021). Such benefits are already being derived from smart cities in many countries. Furthermore,

many smart digital communities also facilitate citizen participation and online deliberation via new IoT technology. Through enabled links, numerous municipalities across the United States and elsewhere help residents to learn about and get involved in civic organizations, churches, youth organizations, sports clubs, and other volunteer organizations (Milankovich, 2022: 23).

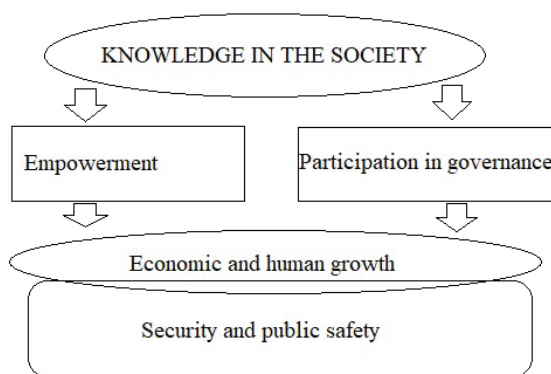


Figure 6 — The Positive Impact of Knowledge.

Source: Modified from: Nath (2003: 5).

Рисунок 6 — Позитивное влияние знаний.

Источник: Модификация: Натх (2003: 5).

The need to develop more smart cities in Nigeria towards combating security challenges and ensuring digital governance cannot be overemphasised. Efforts in this venture require effective collaboration between the security sector and urban planners in order to create adequate ‘defensible space’. The term, as developed by city planner Oscar Newman “encompasses propositions on the relationship between crime and physical environment as well as strategies of crime prevention and internal security” (Mshelia, Kpada & Salami, 2022). It refers to a residential environment in which the buildings, layout and site plan among other physical elements enable the residents to play vital roles in maintaining their security (Newman, 1976). It is a proven strategy for designing safe housing which has been used by security and housing authorities in the US, UK and other developed countries.

CONCLUSION

Digital governance is the surest way of tackling the challenges of the 21st century. The global COVID-19 pandemic that grinded all face-to-face activities in 2020 served as a timely reminder, especially to countries that are sleepwalking in the journey to digitalisation. Though Nigeria has set the ground running in this venture with differ-

ent digital initiatives across different sectors, widespread insecurity and exclusion have continued to militate against their success. It goes without saying that digital initiatives in an unsafe environment and without large concentration of digitally active, literate and economically empowered citizens is anything but a drive towards digital governance. Security of lives and properties as well as inclusion in all ramifications need necessarily be significantly improved to achieve the objectives of e-governance initiatives in the country, and drive towards digital governance. This can be achieved by the formulation and implementation of appropriate digital policies while navigating through the three core relationships of e-governance as expounded above.

REFERENCES

Abubakar, M. D. (2013). *The police, public safety and internal security*. Lagos: First Academic Publishers.

Adepetun, A. (2022, September 5). More Nigerians make calls as active mobile subscriptions hit 208.6m. *The Guardian*. <https://guardian.ng/news/more-nigerians-make-calls-as-active-mobile-subscriptions-hit-208-6m/>

Afande, F. O., & Mbugua, S.W (2015). Role of agent banking services in promotion of financial inclusion in Nyeri town, Kenya. *Research Journal of Finance and Accounting*, 6(3), 4–12.

Akinwotu, E. (2022, January 13). Nigeria lifts Twitter ban seven months after site deleted president's post. *The Guardian*. <https://www.theguardian.com/world/2022/jan/13/nigeria-lifts-twitter-ban-seven-months-after-site-deleted-presidents-post>

Akpanung, O., & Gidigbi, M. O. (2014). Recent banking reforms in Nigeria: Implications on sectoral credit allocation and economic growth. *International Journal of Business and Social Science*, 5(13), 91–104.

Alava, S., Frau-Meigs, D., & Hassan, G. (2017). Youth and violent extremism on social media: Mapping the research. *UNESCO*. <https://unesdoc.unesco.org/ark:/48223/pf0000260382>

Alonso, B. (2021, May 5). Customize e-commerce: Build personalisation strategy with Forrester method. *Kibo Commerce*. <https://kibocommerce.com/blog/forrester-post-methodology-building-personalization-program/>

Azeez, O. (2019, December 3). Cybercrime cost Nigeria N288bn in 2018. *Business A.M.* <https://www.businessamlive.com/cyber-crime-cost-nigeria-n288bn-in-2018/>

Bernhard, I. (2014). *E-government and e-governance: Local implementation of e-government policies in Sweden*. (Doctoral thesis, KTH Royal Institute of Technology, Stockholm, Sweden). <https://urn.kb.se/resolve?urn=urn:nbn:se:hv:diva-6793>

Central Bank of Nigeria (2005). *Banking supervision annual report*.

Central Bank of Nigeria (2010, August 19). *Nigerian uniform bank account number standards*, 1.

Central Bank of Nigeria (2013). *Guidelines for the regulation of agent banking and agent banking relationships*.

- Central Bank of Nigeria and Enhancing Financial Innovation & Access (2019, December). *Assessment of women's financial inclusion in Nigeria*.
- Central Bank of Nigeria (2017). *Regulatory framework for bank verification number (BVN) operations and watch-list for the Nigerian banking industry*.
- Central Bank of Nigeria (2018a, April). *Revised standards on Nigeria uniform bank account number (NUBAN) scheme for banks and other financial institutions in Nigeria*.
- Central Bank of Nigeria (2018b). *National financial inclusion strategy*.
- Chude, N. P., & Chude, D. I. (2014). Impact of agent banking on performance of deposit money banks in Nigeria. *Research Journal of Finance and Accounting*, 5(9), 3–10.
- Dunleavy, P., & Margetts, H. (2015). Design principles for essentially digital governance. *Paper to the 111th Annual Meeting of the American Political Science Association*, San Francisco, 3-6 September. <http://eprints.lse.ac.uk/64125/>
- European Commission (2020). *Exploring Digital Government transformation in the EU-Analysis of the State of the Art and Review of Literature*. doi:10.2760/480377
- Freitag, R. (2022, October 18). Battle of the centuries. *Science Reference Services*. <https://www.loc.gov/rr/scitech/battle.html>
- Furuholt, B., & Wahid, F. (2008). E-government challenges and the role of political leadership in Indonesia: The case of Sragen. In *Proceedings of the 41st Hawaii International Conference on System Sciences*. doi:10.1109/HICSS.2008.134
- George, T.O., Onwumah, A.C., Ozoya, M.I., & Olonade, O.Y. (2021). Good governance, social order, and development in Nigeria: The critical role of gender inclusion. *African Journal of Reproductive Health*, 25(5), 201–208. doi:10.29063/ajrh2021/v25i5s.18
- Hallsworth, M., Snijders, V., Burd, H., Prestt, J., Judah, G., Huf, S., & Halpern, D. (2016). Applying behavioral insights: Simple ways to improve health outcomes. Doha, Qatar: *World Innovation Summit for Health*, November 29–30.
- Hamid, B., Jhajhi, N. Z., & Humayun, M. (2020). Digital governance for developing countries: Opportunities, issues, and challenges in Pakistan. *IGI Global*, 36–37. doi:10.4018/978-1-7998-1851-9.ch003
- Ibrahim, U. (2019). The impact of cybercrime on the Nigerian economy and banking system. *NDIC Quarterly*, 34(12), 1–20.
- Independent National Electoral Commission (n.d). *National assembly pledges commitment to electoral reform as INEC calls for speedy passage of amendment bill*. <https://www.inecnigeria.org/national-assembly-pledges-commitment-to-electoral-reforms-as-inec-calls-for-speedy-passage-amendment-bill/>
- Inobemhe, K., Isah, A., & Abu, P. (2021). Assessing the adoption of digital technologies in 21st century political communication in Nigeria. *Journal of Contemporary Social Research*, 5(2), 46–56.
- Kalat, J. W. (2002). *Introduction to Psychology* (6th ed.). Pacific Grove: Wadsworth Group.
- Kavanagh, C. (2019, August 28). New tech, new threats, and new governance challenges: An opportunity to craft smarter responses? *Carnegie Endowment for International*

- Peace. <https://carnegieendowment.org/2019/08/28/new-tech-new-threats-and-new-governance-challenges-opportunity-to-craft-smarter-responses-pub-79736>
- Kazeem, Y. (2019, Feb.20). It's become much harder to rig elections in Nigeria thanks to technology. *Quartz Africa Weekly*. <https://qz.com/africa/1553505/nigeria-election-rigging-inec-card-readers-and-pvc-protect-polls>
- Kemp, S. (2022, October 26). Reels grew by 220M users in last 3 months (and other jaw-dropping stats). *Hootsuite*. Retrieved January 12, 2023. <https://blog.hootsuite.com/simon-kemp-social-media/>
- Kosorukov, A. A. (2017). Digital government model: Theory and practice of modern public administration. *Journal of Legal, Ethical and Regulatory Issues*, 20(3), 1–10.
- Lindsey, N. (2019, March 12). Cyber criminals have turned social media cyber-crime into a \$3 billion business. *CPO Magazine*. <https://www.cpomagazine.com/cyber-security/cyber-criminals-have-turned-social-media-cyber-crime-into-a-3-billion-business/110>
- McAfee (2018). *The economic impact of cybercrime — no slowing down (Executive Summary)*.
- McIver, W. J., & Elmagarmid, A. K. (2002). Introduction. In W. J. McIver, & A. K. Elmagarmid (Eds), *Advances in digital government: Technology, human factors, and policy* (pp. 1–36). New York: Springer. doi: 10.1007/b116295
- MicroSave Consulting (2020, April). *Digital governance: Ideas and lessons from India*.
- Milakovich, M. E. (2014). Digital governance and collaborative strategies for improving service quality. In *Proceedings of the International Conference on Knowledge Management and Information Sharing (KMIS-2014)*, 109–118. doi:10.5220/0005021001090118
- Milakovich, M. E. (2022). *Digital governance: Applying advanced technologies to improve public service* (2nd ed.). New York: Routledge. doi:10.4324/9781003215875-1
- Mshana, J. A. (2015). Cybercrime: An empirical study of its impact in the society- a case study of Tanzania. *HURIA Journal of the Open University of Tanzania*, 19, 72–87.
- Mshelia, I. H., Otakey, A. H., & Salami, U. J. (2022a). Assessment of the impact of insecurity on women's entrepreneurial activities in Shiroro local government area of Niger state. *CrimRxiv*. doi:10.21428/cb6ab371.977b5ad1
- Mshelia, I., H. Kpada, R. Y., & Jefferey, U. S. (2022). The Security Implication of Neglecting Tourist Attractions in Nigeria: A Case Study of Zuma Rock. *Research Square*. doi:10.21203/rs.3.rs-1944156/v1
- Naraya, D., Patel, R., Schafft, K., Rademacher, A., & Koch-Schulte, S. (2000). Can anyone hear us? Voices of the poor. *World Bank Group*. doi:10.1596/0-1952-1601-6
- Nath, V. (2003). Digital governance models: Moving towards good governance in developing countries. *The Public Sector Innovation Journal*, 8(1), 1–20.
- Newman, O. (1976). *Design guidelines for creating defensible space*. National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U. S. Department of Justice.

Nigeria Inter Bank Settlement System (2022a, Dec. 9). *E-payment transactions in Nigeria hit N38.9 trillion in November 2022*. <https://nibss-plc.com.ng/news/4ypn6nbvb7f65sd-vkry4q62j5a#:~:text=E%2Dpayment%20Transactions,08%3A39%3A08>

Nigeria Inter Bank Settlement System (2022b, Apr. 4). *BVN database rises by 2.3m in three months ...the increase in the number of accounts linked to BVN in the country has remained steady*. <https://nibss-plc.com.ng/news/40t2t6rx62zbf67xa7qmydxma>

Nigeria Identity Management Commission (2021, May 4). *NIN enrolment reaches 54 million as FG approves 31st of October (UPDATED) as NIN-SIM verification deadline*. <https://nimc.gov.ng/nin-enrolment-reaches-54-million-as-fg-approves-30th-of-june-as-nin-sim-verification-deadline/>

NortonLifeLock (2020). *2019 cyber safety insights report*. <https://au.norton.com/norton-lifelock-cyber-safety-report>

Nugraha, T., Achmad, T., Warsono, H., & Yuniningsih, T. (2020). E-governance “innovation for citizen centric governance” through the development of SMS gateway system to online registration. *TIC*, October 21–22, Magelang, Indonesia. doi:10.4108/eai.21-10-2020.2311869

Nwankwo, O., & Nwankwo, N. O. (2014). Sustainability of financial inclusion to rural dwellers in Nigeria. Problems and the way forward. *Research Journal of Finance and Accounting*, 5(5), 24–31.

OECD (2017). *Benchmarking digital government strategies in MENA countries*. OECD Digital Government Studies. Paris: OECD Publishing. doi:10.1787/9789264268012-en

Ogunrinde, T. (2021, May 6). *Lagos and the smart city project*. *Lagos State Government*. <https://lagosstate.gov.ng/blog/2021/05/06/lagos-and-the-smart-city-project-toyosio-ogunrinde/>

Ohwovoriole, O. (2019, June 19). *Nigeria losses about N127bn to cybercrime annually*. *AllAfrica*. <https://allafrica.com/stories/201906190144.html>

Ojedele, T. (2022 Oct. 5). *Reforms to get the electoral process right in Nigeria*. *Voice of Nigeria*. <https://von.gov.ng/reforms-to-get-the-electoral-process-right-in-nigeria/>

Ojong, C. M., Ekpuk, A., Ogar, A., & Emori, E.G. (2014). Banking sector reform in Nigeria: A regulatory imperative for a sustainable banking industry. *Research Journal of Finance and Accounting*, 5(13), 166–189.

Oluwaleye, J. M. (2021). Youth unemployment, rising criminality and the challenge of sustainable security in Nigeria’s south west region. *International Journal of Social Sciences Perspectives*, 8(1), 31–40. doi:10.33094/7.2017.2021.81.31.40

Omotayo, F. O., & Folorunsho, M. B. (2020). Use of social media for political participation by youths in Oyo State, Nigeria. *Journal of Democracy*, 12(1), 132–157. doi:10.29379/jedem.v12i1.585

Onuigbo, A., & Innocent, E. O. (2015). Electronic governance & administration in Nigeria: Prospects & challenges. *Arabian Journal of Business and Management Review*, 5(3), 18–27.

Paul, A. T. (2019). The role of social media in voter education in Nigeria. *American Journal of Research and Review*, 1(3). doi:10.33552/SJRR.2019.01.000511

- Peters, B. G., & Pierre, J. (2016). *Comparative governance: Rediscovering the functional dimension of governing*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781316681725
- Ramon, O., & Azubuike, C. (2021, Oct. 16). Nigerians without mobile phones 20 years after GSM revolution blame poverty, others. *Punch*. <https://punchng.com/nigerians-without-mobile-phones-20-years-after-gsm-revolution-blame-poverty-others/>
- Ravšelj, D., Umek, L., Todorovski, L., & Aristovnik, A. A. (2022). Review of digital era governance research in the first two decades: A bibliometric study. *Future Internet*, 14, 126. doi:10.3390/fi14050126
- Sanusi, S. L. (2012). Banking reform and its impact on the Nigerian economy. *CBN Journal of Applied Statistics*, 2(2), 115–122.
- Sher, G., & Sturm, E. (2018). Social media and peacebuilding: Could mindsets be positively affected? *Strategic Assessment*, 21(3), 47–57. <https://www.inss.org.il/wp-content/uploads/2018/11/Sher-Strum.pdf>
- Shinkaiye, J. K. (2004). National Security and Challenges of the 21st Century. A paper presented at the *National Institute Kuru* to SEC 26 participants.
- Soludo, C. C. (2004). Consolidating the Nigerian banking industry to meet the development challenges of the 21st century. An address delivered to the *Special Meeting of the Bankers' Committee*, held on July 6, 2004 at the CBN Headquarter, Abuja.
- Suleiman, Q. (2022, Sep. 6). International Literacy Day: Adult illiteracy in Nigeria now 31% -Minister. *Premium Times*. <https://www.premiumtimesng.com/news/top-news/552619-international-literacy-day-adult-illiteracy-in-nigeria-now-31-minister.html>
- Thales (n.d.). *Nigerian national ID program: An ambitious initiative*. <https://www.thales-group.com/en/markets/digital-identity-and-security/government/customer-cases/nigeria-eid>
- TWI (n.d). *What is a smart city? — Definition and examples*. <https://www.twi-global.com/technical-knowledge/faqs/what-is-a-smart-city>
- United Nations Development Program (1994). *Human development report: New dimensions of human security*. Oxford: Oxford University Press.
- United Nations (2020). *Social media, development and governance. Academy of ICT essentials for government leaders*.
- Uzuegbunam, C. E., & Omenugha, N. (2018). Mainstream media, social media and peace-building in Nigeria: Old challenges, new opportunities? *The Nigerian Journal of Communication*, 15(2), 519–534.
- World population review (2023). *Nigeria population 2023 (Live)*. Retrieved January 11, 2023, from <https://worldpopulationreview.com/countries/nigeria-population>

ИНФОРМАЦИЯ ОБ АВТОРАХ / INFORMATION ABOUT AUTHORS

Isma'il H. Mshelia — M. Sc. (Sociology), Lecturer II at the Department of Sociology, University of Abuja, Abuja, Nigeria.

Исмаил Мшелиа — магистр социологии, преподаватель кафедры социологии, университет Абуджа, Абуджа, Нигерия

A. G. U. Kari — Ph. D. (Sociology), Associate Professor at the Department of Sociology and the Dean of Student Affairs, University of Abuja, Abuja, Nigeria.

А. Г. Умар Кари — Ph. D., доцент кафедры социологии, университет Абуджа, Абуджа, Нигерия.

Статья поступила в редакцию 11.05.2024;
одобрена после рецензирования 05.06.2024;
принята к публикации 05.06.2024.
The article was submitted 11.05.2024;
approved after reviewing 05.06.2024;
accepted for publication 05.06.2024.